

MANAGING SPORTS STATE ANXIETY WITH YOGA AMONG ATHLETES – A PROBE INTO FACTS

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ABSTRACT: The Purpose of the study was to find out, the intervened effect of yoga on State Anxiety among the peak performers of athletics. The subjects chosen for the study were 30 athletes of different genres from University of Madras, Chennai. Their age ranged between 20 and 25 years. They were randomly divided into two groups of 15 each, one being the experimental group and the other a control group. The experimental group underwent a scheduled yoga practice for a period of 8 weeks, 6 days/week as the control group was on daily regular routine. The status of State Anxiety was measured before (Pre-test) and after (Post-test) the experimental period using Manual of State-trait Inventory developed by Spielberger (1970). The data were analyzed statistically for significant differences. Later applying analysis of variance and analysis of co-variance (in case of insignificance), significance in variance is shown, and further Scheffe's test was applied. The result proves that the yogic scheduled practices have made a significant impact on the State Anxiety of the experimental group compared to the control group.

Keywords: Yogic Practices; Experimental group; Control group; Manual of State-Trait Inventory.

INTRODUCTION

State Anxiety is defined as a transitory emotional state or condition of the human organism that is characterized by subjective consciously perceived feelings of tension and apprehension and heightened autonomic nervous system activity [1-3]. The term 'yoga' is used to indicate both the 'End' as well as the 'mean'. In the sense of the 'End', the word 'Yoga' signifies 'Integration' at its highest level. All the means that subscribe to reach this goal also constitute yoga, in the sense of 'yukti' the means or technique. All the practices, whether high or low are calculated to help the progress of the aspirant towards such integration are together known by the name 'yoga'. Asana are those postures with dynamic moments oriented to create physical and physiological changes in the human system. Functions of all vital organs, stimulation of glands and regulation of the blood flow are achieved by proper postures and the muscles in our body are thus firmed and strengthened. Pranayama is the practice of breathing exercises with the three scientific phases namely Puraka (Inhalation), Kumbhaka (Holding the air in the lungs) and Rechaka (Exhalation) in a progressive manner that works centrally and the effects spread to the periphery, too. From the physical point of view, a proper balance among the nadis ensures health, strength, peace and longevity. Pranayama have seasonal effects in its technique and practice. Hence the selection of pranayama for the practice schedule should be based on the seasonal requirements. During practice the three phases, inhalation, holding the breath and exhalation should be observed as 1:1:1 (Initial Stage) 1:2:2 (Intermediate Stage) and 1:4:2 (Advanced Stage). Meditation is a systematic method of mental practice that gives a complete mental, physical and emotional relaxation [4].

Designed Training Package

The science of yoga proclaims that yogic techniques and practices aim at selective as well as wholesome shaping of human body and mind. Hence a selective package of yogic practices consisting Asana (Physical Postures), Pranayama (Breathing Practices) and Meditation (Mental Practices) was designed with performance norms intended to create a positive impacts among the experimental subject on state anxiety. The Scientific basis of yoga offers a wide range of variations in its scopes and benefits on how to utilize those effects for various needs and requirements of general health and fitness more specifically in personal life style. An intensive review of related literature on these area and consultations with the experts in yoga a selected yoga-training package was designed for the subjects under study. The feasibility and acclimatization of the routine was taken to heart during the training routine.

1.1.1 RESEARCH CHALLENGE

The Purpose of the study was to find out, the intervened effect of yoga on State anxiety among the peak performers of athletics.

1.1.2 METHODOLOGY

The subjects chosen for the study were 30 sportsmen who represented University of Madras; Chennai aged between 20 and 25 years. They were randomly divided into two groups of 15 each, one being the experimental group and the other a control group. The experimental group underwent a scheduled yoga practice for a period of 8 weeks, 6 days/week as the control group was on daily regular routine. The status of state anxiety was measured before (Pre-test) and after (Post-test) the experimental period using Spielberger's manual of State-Trait Anxiety Inventory (1970). The data were analyzed statistically for significant differences. Later applying analysis of variance and analysis of co-variance (in case of insignificance), significance in variance is shown, and further Scheffe's test was applied. The Inventory consisted of 40 statements (20-state anxiety and 20-trait anxiety). It includes both positive and negative statements. It is a liker method and each statement consist of 4 responses. The respondent made a tick mark on any one of the responses that fit to them best. The inventory was scored with the help of scoring key and which is given below. A separate scoring method was followed for positive and negative statements and added and it was treated as individual score. The total score constitute the anxiety score. The range of score is 20 to 80 scoring key. For items 2, 5, 8, 10, 11, 15, 16, 19, 20 subjects response, almost, never, sometimes, often and almost always are to be given 4, 3, 2 and 1 scores respectively. For the rest of the items scoring is to be done in the opposite way [3].

Training Package of Yoga

Asana - Padmasana, Vajrasana, Paschimothanasana, Matsyasana, Artha Matsyendrasana, Halasana, Bhujangasana, Dhanurasana, Shalabhasana, Sarvangasana, Pawanmuktanasana, Chakrasana, Utthita Parvakonasana, Virabhadrasana, Utkatasana, Vrksasana, Tadasana, Garudasana, Shavasana.

Pranayama - Nadisuddhi, Nadi Shodhana, Ujjayi, Kapalabhati, Bhramari, Bhastrika, Sitalai, Sitakari

Meditation - Observing the breath (Swami Satyananda Saraswathi, 1993) [5]

Table 1. Yoga Training Schedule

Sl.No.	Description	Period
1	Training duration	8 Weeks
2	Days	6 days (Monday to Saturday)
3	Training Session/ Day	1 Session (Morn & Eve alternatively)
4	Duration of Session	90 Minutes
5	Preparation / Warm-up	15 Minutes
6	Training for specific components	45 Minutes
7	Distributed rests	15 Minutes
8	Relaxation / Warm-down	15 Minutes
Total		90 Minutes Capsule within threshold

Statistical Analysis and Findings

The collected scores from Pre-test and Post-test after statistical analysis reveal significance in the final output of the scores arrived after the experimentation period in post-test scores. The Table-I presents the result of statistical result of significance.

Table 2. Analysis of Variance and Analysis of State Anxiety of Control and Experimental Group

Sources of Variance	df	SSx	SSy	SSxy	SSyx	MSyx	F
Between Means (K-1)	1	0.03	187.50	2.50	182.88	182.88	30.46*
Within Groups (N-K)	27	938.93	971.20	871.60	162.10	6.00	
Total	28	938.97	1158.70	874.10	3.44.99		

Table Value DF (1,27) at 0.05 level : 4.21 / DF (1,27) at 0.05 level : 7.64

Table 3. Scheffe's test for significance of the Difference between Paired means

Mean Values		MD	LS
Group-1	Group-2		
47.57	42.63	4.94	0.01

CI- Value for 0.05 level : 1.83 / 0.01 level : 2.47

Table-1 indicates that after the training programme significant difference was found in (State Anxiety) computation of Analysis of variance as the obtained „F”-ratio computed from adjusted mean sum of squares was 30.46 against the prescribed tabulated value of 4.21 at 0.05 level and 7.64 at 0.001 level of confidence for 1 and 27 degrees of freedom. So the obtained „F”-ratio was significant at both the levels of confidence. The result of investigation revealed that there was significant improvement in State Anxiety through scheduled yoga practice programme. The results by and large were in conformity with the findings of [2].

The means of Pre and Post-test scores of two groups in State Anxiety have been presented graphically in Fig-1.

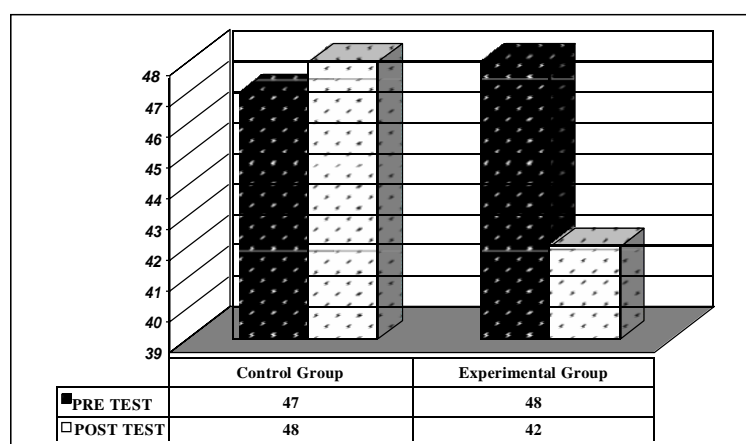


Fig 1: Mean State Anxiety (Pre and Post-test) of Control and Experimental Group

CONCLUSION

The Scheduled yogic practices made impacts on State Anxiety during post training assessment among the University sportsmen. Based on the finding it is concluded that the yogic practices package could be of a notable capsule training to maintain and develop a positive State Anxiety.

1.13 REFERENCES

- [1] D.H. Clarke, H.H. Clarke, Research Process in Physical Education, Recreation and Health, (1970) *Prentice Hall Inc*, New Jersey.
- [2] Y.V. Golubev, Diagnostics and Evaluation of Anxiety with Gymnastic, in Erwin Apitzsch, Anxiety in Sports (Budapest: PEPSAC), 1983, 35.
- [3] C.D. Spielberger, R.L. Borch and R.E. Loshone (1970) Manual of State- Trait Inventory, Palo Alto, California: Consulting Psychological Press.
- [4] B.K.S. Iyengar, Yoga- The Path to Holistic Health, Dorling Kindersley Limited, Great Britain. (2001)
- [5] Swami Satyananda Saraswathi (1993) Asana, Pranayama, Mudra, Banda, Bihar School of Yoga, Muger, Bihar, India, 8th Ed.